

IS MY DRINKING WATER SAFE?



YES, our water meets all of EPA's Health Standards. In 2013, we conducted 4762 tests for contaminants that may be found in drinking water. As you'll see in the Water Quality Data chart, we only detected 10 of these contaminants, and found all of those at safe levels. For Quality Control purposes the Water Treatment Plant is manned around the clock.

WHAT IS THE SOURCE OF MY DRINKING WATER?

Your water, which is surface water, comes from the Center Hill Lake (Mine Lick Creek). The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and septic systems
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems..

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

One sample out of 24 taken between 4/2/08 and 3/3/10 had the presence of one cryptosporidium cyst. Lab testing was unable to determine if the cyst was viable or dead. Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. The cyst found was in the untreated water of Center Hill Lake. The most common treatment method employed to remove cryptosporidium is filtration – a treatment technique which is used at our plant.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limits the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our goal is to protect our water from contaminates and we are working with the State to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) have prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. The Cookeville Water Department system sources rated as moderately susceptible to potential contamination. An explanation of Tennessee's Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at http://www.tn.gov/environment/water/water-supply_source-assessment.shtml or you may contact the City of Cookeville Water Department to obtain copies of specific assessments.

The City of Cookeville Water Treatment Plant is designed to treat 15 million gallons per day (MGD). In 2013 the average daily flow pumped to customers was 10.031 MGD.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

HOW CAN I GET INVOLVED?

If you have any questions or concerns please call or come by our offices at 1860 S Jefferson, Cookeville, TN. The City Council meets on the first and third Thursday of each month. If you have any items that you wish to address, please call the City Hall at 526-9591 to be placed on the council agenda.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OUR OPERATIONS?

The State and EPA require us to test and report our water on a regular basis to ensure its safety. We have always met all of these requirements. We want you to know that we pay special attention to all of the rules.

TASTE AND ODOR

For the most part taste and odor problems are the result of iron, algae and manganese. We use additives such as hydrogen peroxide and activated carbon in an effort to eliminate these problems.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants than the general population. Immuno-compromised persons such as persons with cancer undergoing

chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about their personal sanitation, food preparation, handling infants and pets, and drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

We had 0 sites out of a total of 30 sites sampled to exceed the lead or copper action level. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Cookeville is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

For more information about your drinking water, please call Rodger Phillips at the Cookeville Water Treatment Plant at (931) 858-2646 or Barry Turner at the Dept of Water Quality Control Business Office at (931) 520-5258 or come by our offices at 1860 S. Jefferson, Cookeville, TN 38506 between 8am and 4:30pm.

Water Quality

Most of the Contaminants that we sample for were not detected (ND). The following chart shows only those contaminants that were detected. None of the contaminants detected were at high enough levels to be a violation of the Water Quality Standards. All monitoring results of regulated and unregulated contaminants, including Volatile Organic Compounds are available at the office of Cookeville Water Quality Control.

What does this chart mean?

- **MCLG:** Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL:** Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

- * Most of the data presented in this table is from testing done between Jan 1-Dec 31, 2013. We monitor for some contaminants less than once per year, and for those contaminants, the date of the last sample is shown in the table.
- ** We meet the 'TT' requirement for Total Organic Carbon. We were required to remove 27% and average removal was 60.50% based on 33 samples.
- *** Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator of the effectiveness of our filtration system. Turbidity samples taken in 2013 numbered 2173 individual samples. 95% of all monthly samples must be less than or equal to 0.30 NTU. Turbidity is monitored continuously.

Abbreviations • CCR: Consumer Confidence Report • ppb or micrograms/L: parts per billion or micrograms per liter explained in terms of money as one penny in \$10,000,000 • ppm or mg/l: parts per million or milligrams per liter explained in terms of money as one penny in \$10,000 • N/A: not applicable • NTU: Nephelometric Turbidity Units-Turbidity is a measure of the clarity of the water. Turbidity in excess of 5 NTUs is just noticeable to the average person • pCi/l picocuries per liter (a measure of radioactivity) • AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. • TT: Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water. • MRDL or Maximum Residual Disinfectant Goal: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants • MRDLG or Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Contaminant	Do We Meet the Standards	MCLG in CCR Units	MCL in CCR Units	Level found in CCR Units	Range of Detection	Units	Date of Sample*	Typical source of Contaminant
Total Coliform Bacteria	YES	0	5% Positive Of the 902 samples collected in 2013 only 1 tested positive for Total Coliform Bacteria	0.11%	0	%	*	Naturally present in the environment
Total Organic Carbons	YES	N/A	TT	N/A	**	ppm	*	Naturally present in the environment
Turbidity***	YES	N/A	TT	0.35	0.03 to 0.35	NTU	*	Soil runoff
Lead ¹	YES	0	AL=15	0.747	ND to 3.0	ppb	July 11	Corrosion of household plumbing systems; Erosion of natural deposits
Copper ¹	YES	1.3	AL=1.3	0.043	ND to 0.083	ppm	July 11	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride	YES	4	4	1.27	0.01 to 1.27	ppm	*	Erosion of natural deposits; Water additive which promotes strong teeth
Sodium	YES	None	None	23.0		ppm	*	Sodium Hydroxide is added to the treatment process for corrosion control and water stabilization
Chlorine	YES	MRDLG = 4	MRDL = 4	2.094 Avg.	0.7 to 2.9	ppm	*	Water Additive used to control microbes
TTHMs [Total Trihalomethanes] ²	YES		80	34.12	7.44 to 126	ppb	*	By-product of drinking water chlorination
Haloacetic Acids	YES		60	20.6	5.62 to 65.6	ppb	*	By-product of drinking water chlorination
Synthetic Organic Contaminants including Pesticides and Herbicides The City of Cookeville is waived on these except Atrazine and it was below the Detection Limit.								

¹ Lead and copper values are reported in 90th percentile values. During the most recent round of lead and copper testing, 1 out of 30 households tested contained concentrations exceeding the action level.

² Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

City of Cookeville Department of Water Quality Control 2014 Consumer Confidence Report

Visit our web site at <http://www.cookeville-tn.org/water/>